

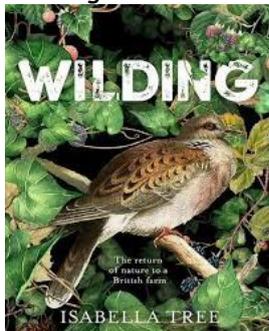


Quarterly Update No 21 ... July 2020

Winter greetings! While gathering restrictions have altered 2020 plans for all, LUCI projects are back on track and we've set new dates for planned activities (p.6). We hope to reconnect with members and supporters and meet new friends at some of our upcoming events. Enjoy the newsletter.

Farming differently - "A sweet spot between production and wildlife"¹

One of my friends in England has been sending me some interesting reading matter and links of late relating to new ways of farming. A book entitled "Wilding" by



Isabella Tree² chronicles the story of a quiet revolution in farming practices on the Knepp family estate in West Sussex, England, and a link to the

WildEast website reveals an equally bold undertaking by a group of farmers in East Anglia, England³.

Nearly two decades ago, Isabella Tree and husband Charlie Burrell faced the grim realisation that conventional intensive farming methods on their 3,500 acres were economically unsustainable. Through a timely combination of meetings with inspiring individuals resonating with their love of wildlife and the opportunity to benefit from the Government's Countryside Stewardship Scheme, Burrell and Tree embarked on a bold experiment which saw their land "released from its cycle of

drudgery" pursuing conventional practices of food production.

Tree says that "[I]ike most farmers we considered ourselves stewards of the land, while, deep down, we felt that nature was not farming business." The guiding principle of their new "wilding" approach was allowing natural processes to have (almost) free rein with some human assistance and the introduction of free-roaming herds of large grazing animals. The couple have not followed a prescribed plan but worked in concert with the ecological processes that were emerging on their land. The Knepp project has proved hugely successful not only in terms of food production (organic meat products), a thriving ecotourism enterprise and financial indicators but in the flourishing and diverse ecosystems now on the land and the return of a number of rare butterfly, bird and fungi species.

Perhaps an even more daring venture than the Knepp project is that of WildEast whose founders are advocating a landscape scale approach to farming that works with nature "rather than shut it out". Restoring natural processes for wildlife sits at the heart of WildEast's mission and the founders are emphatic that restoring wildlife is "not stopping farming, it's fitting farming systems into natural systems so we can restore biodiversity...not to create space for nature but to find out how we live inside the ecosystem."⁴

Googling on from the WildEast website led me to the Nature Friendly Farming Network in England.⁵ This network of farmers describes itself as "equally passionate about wildlife and sustainable farming, where

¹ [Farmer Stories - Nature Friendly Farming Network](#)

² Tree, Isabella (2018) *Wilding*.
<https://www.panmacmillan.com/authors/isabella-tree/wilding/9781509805105>

³ [The Conversation "Farmers hatch plan to return area size of Dorset to wild nature"](#)

⁴ *Ibid*.

⁵ <https://www.nffn.org.uk/>

farmers and nature work hand in hand, not just focusing on sustainable practices for better production but to also deliver for wildlife at a landscape scale." What impressed me about the case studies provided on the website is the equal attention given to measuring success in the condition of natural processes, that is, how well the land is functioning, and how diverse is the flora and fauna supported by these processes as is given to food production, input costs and soil health.⁶

I was keen to know about similar developments in Australia and web searches for farming that involved 'wilding' or restoring natural processes tended to come up under the rubric of regenerative agriculture. Opinions vary on what is regenerative agriculture (RA) but a generally accepted view is that "the principle of regenerative agriculture and regenerative pastoralism is to enhance natural ecosystem services, resulting in sustainable production, an improved natural resource base, healthy nutrient cycling, increased biodiversity and resilience to change."⁷

In searches for examples of RA in practice, I tapped into podcasts by Charlie Arnott, 2018 Bob Hawke Landcare Award winner.



The podcasts follow his journey transitioning from what he calls "industrial farming practices" to regenerative agriculture.⁸ Arnott identified as a catalyst for this transition the realisation that his farming practices were not aligned with his values of caring for the land and caring about the impact of his product on people's health and wellbeing.

⁶ [Farmer Stories - Nature Friendly Farming Network](https://www.farmerstories.com.au/nature-friendly-farming-network)

⁷ <https://www.agric.wa.gov.au/land-use/regenerative-agriculture-and-pastoralism-western-australia>

⁸ <https://charliearnott.com.au/Podcast/>

⁹ <https://soilsforlife.org.au/dukes-plain-continuous-improvement-of-the-farm-resource/>

I was interested to see if, like the English examples, farmers adopting the regenerative approach in Australia reported as much on their success in regenerating natural processes as on food production and financial indicators. I found inspiring examples where that is the case in reports on continual improvement practices by graziers Shane and Shan Joyce of Dukes Plains⁹ and reports by ABC Landline on Holbrook graziers the Coughlans and Queensland banana growers Frank and Dianne Sciacca¹⁰. Each case involved obvious valuation of the contribution of natural processes and native species to improving their operations.

While followers of new farming approaches such as 'wilding', regenerative agriculture or holistic farming may not have yet reached critical mass, there is growing acceptance that conventional intensive farming methods have wrought, in many cases, soil degradation, water storage problems and negative impacts on native flora and fauna. "When you start killing anything that's living, invertebrate insects, whatever it may be, you've then broken an ecosystem cycle," says Mr Sciacca¹¹. As promoted by the Regenerative Agriculture Alliance, we need "a new way of farming that better supports, and is supported by, natural processes."¹²

Additional web links of interest...

[The Guardian Magical wilderness farm: raising cows among the weeds at Knepp](#)

[The Guardian review of Wilding by Isabella Tree](#)

[WildEast founders](#)

[Land to Market, Australian Holistic Management Cooperative Limited](#)

[ABC news 31/01/2020 Regenerative agriculture solution or sellout](#)

¹⁰ <https://www.abc.net.au/news/2019-05-18/farmers-use-regenerative-agriculture-to-fuel-biodiversity/11111066>

¹¹ *Ibid.*

¹² <https://www.scu.edu.au/school-of-environment-science-and-engineering/regenerative-agriculture/>

Continuing our members' stories...

"A short history of our land conservation journey" by Jim and Jill Scanlan



I asked Jim what made him aware of the environment. He grew up in Canberra and holidayed on the South Coast of NSW. The family went blackberry picking and enjoyed the State forests near Durras. At Phillip College ACT he studied "Canoe Making", "Bee Keeping" and "Back to Earth" as part of the senior curriculum. He subscribed to "Grass Roots" magazine as a teenager in the late 1970s, having purchased land at Millard Creek with his father. His plan was to live a self-sufficient lifestyle in the valley.

I grew up in The Gap, Brisbane, close to Enoggera Creek, where we could be free range kids, climbing camphor laurel trees and making hideouts in the dense lantana and hunting cane toads. Fresh water turtles were plentiful, the only obvious indigenous creatures there. At some stage I became aware that this was not a natural riparian environment.

In my late teens, a friend of mine was dating the President of the Moreton Island Protection Committee. I went on a field trip to the Island, where we learned about the environmental issues facing this wonderful place. By coincidence, Jim also had links to Moreton Island, having worked at Tangalooma Resort, and would do Island tours for visitors.

In the early 1990s, Jim and I were members of the "Friends of the Escarpment Parks", which was set up by neighbours living in and around Prince Henry Heights. Our friend Nick English designed the logo and printed the T shirts. We learned a great deal through this organisation. Jim spent many days in Redwood Park, as a member of the group, mapping weeds like Madeira vine, cat's claw and broad leafed privet. We planted native shrubs and tended them and

were so proud to see them grow and flourish.

We have two "Land for Wildlife" listed properties. 10 acres on Lamb Island in Southern Moreton Bay and 395 Saw Pit Gully Rd. Parts of the Lamb Island property were overrun with Barner grass, lantana and umbrella trees, Singapore daisy, Cocos palms, small leaf privet, Easter cassia and most hated, ochna. Before we could do much with that property, Jim cleared the two metre high grass. Together we cleared lantana from around a small dam, and discovered many native species growing in some areas. We joined "Indigescares" and learned about species indigenous to the Islands. We have occasional campaigns for cutting and painting the woody weeds, and Land for Wildlife supplied chemicals to kill the dreaded Singapore daisy. Feedback from our Land for Wildlife mentors is that we may have too many Birdwing butterfly vines growing!



A young Jim tackling Barna grass on Lamb Island.

Saw Pit Gully Road has its own challenges, with cattle, feral pigs and deer roaming the property and the usual exotic plants, particularly lantana and Madeira vine. Jim

has had success with spraying the lantana, and we hope to clear a small area of Madeira vine in the spring as part of the grant project. We are delighted that there is a wealth of native species at Saw Pit Gully Road and are glad to be part of LUCI. Our main wish is to have more time to devote to conserving these places that are special to us.

LUCI part of a bigger picture

As a regional alliance partner in the Great Eastern Ranges initiative (GER),¹³ LUCI was excited to hear that the Ian Potter Foundation is providing a substantial grant to both the GER and Gondwana Link¹⁴ to advance "work to restore and reconnect habitat, stem the loss of native species, provide robust natural solutions to climate change, and improve the health, wellbeing and economies of communities at the continental scale".¹⁵

The Foundation noted the importance of both GER's and Gondwana Link's whole-of-landscape approach to addressing biodiversity loss and acknowledged their methods of working with partners to reach grassroots landholders and communities of interest. Gary Howling, Executive Director (GER) says "[t]hrough the funding we are advancing our efforts to bring people together, coordinate resources, build knowledge and capacity, and deliver best available science and expertise."

As a member of the GER family, LUCI is committed to connecting local landholders and local projects to the vision and work of GER. Details of this story and more can be viewed at the newly refurbished GER website www.ger.org.au

Friends of Dwyers Scrub

With social distancing restrictions eased, QPWS has given volunteers the green light to resume work in parks. After months of the weeds having free rein, our FoDS team

will be back to tackle Cats Claw and check out how the Madeira beetles, released recently by QPWS, are faring.

This month, Senior Ranger Tim Wood generously provided his time to give members of the FoDS team an introduction to the ARCGIS and QGIS platforms as well as an update on the Avenza mapping platform. GIS platforms allow the user to pull together multiple layers of data to provide a detailed understanding of the landscape's vegetation, flora and fauna and many other variables. Mapping biodiversity along with vegetation and habitat information can tell us where we need to focus our efforts in connecting patches of native habitat. Thanks Tim.

LUCI Winter Walk at Helidon Hills

Sixteen LUCI members and friends braved the threatening skies early last Sunday morning to join a long-awaited LUCI special interest walk. Led by our human encyclopedia on native flora, LVRC's Martin Bennett, the group visited two sites in the Helidon Hills State Forest areas.



Intrepid walkers on LUCI's Winter Walk at Helidon Hills led by LVRC's Martin Bennett.

The areas contain a range of regional ecosystems featuring eucalypt forests and woodlands which include threatened and regionally significant plant species. Walkers were fortunate to see the threatened *Grevillea quadricauda*, a small 1.5m shrub with light green soft hairy

¹³ <https://ger.org.au/>

¹⁴ <http://www.gondwanalink.org/>

¹⁵ <https://ger.org.au/scaling-up/>

foliage and single red flowers, and *Hakea florulenta*, Wallum hakea, a wattle-like light green leaved shrub to 1.5m. Other highlights included *Angophora woodsiana*, *Cassytha sp.* and *Eucalyptus baileyana*.



Grevillea quadricauda showing a single red flower.

Glossy Black Cockatoo project

Surveying work on the Glossies' feed trees has been able to continue throughout the past six months as the work is undertaken by only one or two persons at any time. The significant die off in the *Allocasuarina littoralis* (Black sheoak) trees appears to be a constant across all transects containing that species. Additional data on rainfall, temperature, topography and soil moisture will be gathered to determine contributing factors to the death rate.

Our project mentor, Dr Guy Castley, is planning to make his annual visit later this year to provide a summary of our findings to date and visit project sites. Details of his visit will be advised as soon as arrangements are finalised.

Of interest...

One of the recipients of Birds Queensland's 2020 Research Grants is UQ PhD student Courtney Melton whose research explores habitat requirements for woodland birds including the value of understorey vegetation to these birds. As many LUCI members are avid 'birdos' and our landscape provides habitat for a diversity of woodland birds, I contacted Courtney to find out

more about her project and what we can learn and apply in our own landscape. An interesting dimension to Courtney's research is investigating "how to manage one of the key threatening processes to the decline of woodland birds - the overabundance of native noisy miners (*Manorina melanocephala*)."¹⁶ Courtney provided the following..."I am particularly interested in understorey vegetation and its value to the woodland bird community in both the resources it provides, particularly for the smaller bodied birds, and its potential to deter noisy miners (because we know from previous research that noisy miners don't appear to like shrubby sites - they prefer open habitat and edge habitat, likely because of the vantage points it offers them for defending the area they occupy)."

In one of the very early LUCI newsletters there is an item on the direct and knock on environmental threats posed by noisy miners. The item was prompted by observations of increasing numbers of these birds in some areas in our landscape. Also of interest are observations by some LUCI members of the diversity of woodland birds found in tracts of lantana and the absence of noisy miners in these areas. These anecdotal observations suggest an adaptation by woodland birds to an altered landscape. There are many insights to be gained and LUCI will stay in touch with Courtney and follow her research.

Of further interest...

[Woodland Birds of South East Australia
https://mdahlem.net/birds/land/woodland.php](https://mdahlem.net/birds/land/woodland.php)

While the link below is to an American resource, I'm sure you will enjoy the amazing repertoire of birds' songs. Who could not want to conserve the woodland understorey for our local songsters?

<https://academy.allaboutbirds.org/feature/s/birdsong/songbirds-in-action>

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

¹⁶Email communication.

Upcoming events ...

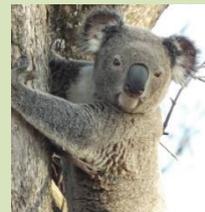
- ☞ Weeding with **Friends of Dwyers Scrub** on **first Thursday of each month** from **8:00-10:30am** recommences in August. All welcome. Contact lucatchmentsinc@gmail.com
- ☞ **Google Earth for Beginners workshop** with LVRC's Martin Bennett on **Saturday 1st August, 9:30am-12:00pm**. Group size is limited and only **three places are left**. Learn how to use placemarks, turn those placemarks into a file, how to draw polygons, and turn them into a file, and some basics on using the layer pane, saving layers and files. Venue directions on booking your place by email to lucatchmentsinc@gmail.com
- ☞ **Property Planning Group meeting** hosted by Barb Lindbergs on **Sunday 6th September**. Erosion will be the discussion topic and LUCI's Remote Camera Loan program will be explained. Arrive **8:45am for 9:00am start** and bring morning tea to share. All members welcome. Venue details available on **RSVP** to lucatchmentsinc@gmail.com
- ☞ LUCI has been invited to have a **Threatened Species information stall** at **Ma Ma Creek Community Market** on **12th September**. If you have some time, come and help promote locally threatened species and messages to conserve our wildlife and their habitats. For further information contact lucatchmentsinc@gmail.com
- ☞ Springfield Lakes Nature Care group is having a **tree planting event** as part of the **Opossum Creek Revegetation** project on **Sunday, 13th September**. If you are interested in lending a hand on the day to a fellow conservation group, contact secretary@slnc.org.au for further details.

- ☞ **LUCI's Native Grasses and Grassy habitats workshop** with Dr Darren Fielder, Red Leaf Environmental, on **Saturday 20th September, 9:30am-12:30pm**. Learn how to identify different native grass species, about the ecology of native grasses and grassy habitats and how to assess the condition of grasslands. The workshop will be followed by a visit to a native grass field site. For further information, check out the [LUCI website](#). If you have not already booked or confirmed your booking, contact lucatchmentsinc@gmail.com
- ☞ **Propagating native plants workshop** by LUCI member Karen Gruner at Tanglewood Natives nursery on **Sunday 11th October, 9:30-11:30am**. A practical, hands on workshop covering tools for propagation, different seed types, collection and storage, pre-treating seeds, seeding into trays/pots, how to take cuttings and aerial layering. Attendance fee of \$25, morning tea provided. Places are limited so get in early and book your place at lucatchmentsinc@gmail.com

Test your knowledge on local fauna!

This issue...the Koala

(Answers on the last page)



- Do you know the scientific name for the Koala?
- Which animal is the Koala's closest relative?
- Is it the male or the female Koala that has a dark brown scent gland in the centre of the white of the chest?
- How many digits are there on a Koala paw?
- True or false...Koalas have fingerprints?
- True or false...a Koala has highly developed eyesight?
- On average, which are bigger... Koalas in the south of Australia or those in the north?

What some butterfly larvae feed on...by Paul Grimshaw

The Fuscous Swallowtail's larval food plants include plants in the Rutaceae family (*Flindersia* spp., *Geijera* spp., *Boronia* spp., *Micromelum minutum* and *Citrus*).



Fuscous Swallowtail. Photo by Paul Grimshaw

The Orchard Swallowtail's larvae feed on some of the same plant species in the Rutaceae family as the Fuscous Swallowtail. The photo below shows a female Orchard Swallowtail feeding on an *Abelmoschus moschatus* subsp. *tuberosus* - Native Rosella flower.



Orchard Swallowtail. Photo by Paul Grimshaw

The stunning Blue-banded Eggfly's larvae feed on *Pseuderanthemum variable* - the native Love Flower/Pastel Flower. This native plant species is very easy to propagate and once you've got it growing you've got it for good. Best not to keep it in your nursery or bush house because it will find its way into many of your other pots. Its great feature is that it is the host plant food for a few other butterfly species larvae. This includes Australian Leafwing, Common Eggfly, Danaid Eggfly and Blue Argus butterflies.



Blue-banded Eggfly. Photo by Paul Grimshaw

The Large Grass-yellow's larval food plants are quite varied and includes native species in the following genera such as *Cassia*, *Senna*, *Breynia*, *Phyllanthus*, *Aeschynomene*, *Indigofera* and *Acacia*. The photo shows a male Large Grass-yellow feeding on a flower of *Hibbertia scandens* - Twining Guinea Flower.



Large Grass-yellow. Photo by Paul Grimshaw

The larval food plants of the Haly's Speckled Line-blue include *Guilandina bonduc* formerly *Caesalpinia bonduc* - Grey Nicker, *Harpullia pendula* - Tulipwood, *Trema tomentosa* - Poison Peach Bush and *Pipturus argenteus* - White Nettle. The adult male and female of this small Lycaenid butterfly have similar underside patterning, but the female seen in this photo is bluer on the upperside. The larvae of this butterfly are occasionally attended by ants, who are rewarded by sweet secretions from the larvae.



Haly's Speckled Line-blue. Photo by Paul Grimshaw

Clearwing Swallowtail spiny-looking larvae feed on various *Aristolochia* species including flowers of the exotic **Aristolochia elegans* - Dutchman's Pipe. In Southeast Queensland, the larvae primarily feed on the native *Aristolochia meridionalis* - Forest Aristolochia. The photo shows the male and female in a mating sequence. The larger male is more distinctly patterned and colourful than the female, whose colouring is quite subdued.



Photo by Paul Grimshaw

A little-known obligate pollinator moth...by Dr Don Sands

I am planning to propagate cuttings of the threatened *Boronia splendida*, as part of a project to attract *Heliozelidae* (obligate pollinator moths of certain *Rutaceae*). The project on these minute moths involves several people across a number of states collecting the moths for taxonomic studies. *Boronia*, *Zieria*, *Phlebalium*, *Crowea* and several other related *Rutaceae* apparently need these moths as obligate pollinators. There are about 160 species of *Boronia* in Australia; they occur in all states

and Northern Territory and are thought to each have one species of moth as the obligate pollinator.



Photo by Don Sands

I have focussed on those *heliozelid* moths associated with subtropical *Boronia* spp., and aim to cultivate some of the threatened species as potted plants. When in flower, they will be exposed to moths in the field (as "Decoys" for ovipositing moths), and then returned to the greenhouse for studies on their immature development (eggs, larvae, pupae etc).

To date there is nothing much published on the biology of these moths. Our "Heliozelid" study group is particularly interested in the likely impacts of fires on moths and their roles as obligate pollinators, and potentially where a *Boronia* sp. could be extinguished when fire destroys its moths in a certain area, even though the plant may be capable of regrowth or germination of viable seeds.

Further reading on the topic at...

[Milla-Heliozelid-ms \(002\).pdf](#)

If you would like to share a story about wildlife or native habitats on your property, send your story with photo to lucatchmentsinc@gmail.com

A myriad of native tree seeds by Martin Bennett

It's that time of year again; we are getting to the season where flowering and fruiting are starting. By the end of August-start of September, plants should start their flowering and fruiting in earnest. Spring and Summer should become the best times for the largest diversity of seed to be encountered. Best practise in collecting seed is to not break off the branches that the fruit are on, try and just remove the fruit allowing for more fruit to be collected in the next season. Collect fruit from specimens that are a good distance apart, and vary collecting seed to different specimens each season to prevent creating a low genetic pool, also remember to please leave some fruit/seed for the wildlife.

Some example seeds...



Koda seeds

Koda (*Ehretia acuminata*) is a medium height tree with large sprays of small white flowers, followed by the yellow succulent fruits.



Red Kamala seeds

Red Kamala (*Mallotus philippensis*) is a medium height tree featuring pale yellow flower spikes and red, dusty hard capsules. The dust is used in water or alcohol to dye the Monks' robes in Asia.



Snow wood (*Pararchidendron pruinatum*) a creek side small tree, bears white/pale yellow flowers which are followed by these "Monkey earrings". The Snow wood is a relative of the Wattles.

If you are **interested in propagating native plants from seeds or cuttings**, then you won't want to miss the workshop with Karen Gruner, Tanglewood Natives on October 11th... **see upcoming events (p.6)** for further details.

Local plant profile - Deluxe accommodation...

by LUCI member Karen Gruner

I enjoy travelling along the road verges of the Lockyer Valley to collect seed and lately I've been captivated by the many native herbaceous plants otherwise so easily missed among the trees and shrubs. Many of them have lovely dainty, often brightly coloured flowers and it's common to see them growing very well in the poorest of soils. My latest experiment is to grow some of these plants in pots to see how they cope with an 'upgrade' in living conditions, i.e. good quality potting mix, slow release fertiliser and regular watering and results have shown that they love it!

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The Helidon Hills is one of my favourite areas to explore because there is a unique selection of native herbs growing in the sandy soil. Back in autumn I collected a Wild pansy (*Velleia spathulata*) from there



and planted it in a pot. It has thrived, produced a pup and hasn't stopped flowering since. Placing it on the edge of the bench has allowed the sprays of bright yellow blooms to cascade over. I think it would do well in a hanging basket.

It's easy to find the common native bluebell (*Wahlenbergia* spp.) along roadsides. They often pop up in our lawn, but of course if you mow the lawn you lose the flower. How about planting one in a pot? The one in the photo is in a 140mm pot and has rewarded me with electric blue coloured blooms for many weeks.



After the flooding rains in early 2013 I noticed a few Trigger plants (*Stylidium graminifolium*) popping up in the backyard. Sadly, they haven't appeared since but Crow's Nest Community Nursery had some for sale. I bought one and put it into a 140mm pot. Trigger plants in the wild usually consist of a few leaves with the flower stem in the centre. Well this one quickly outgrew the pot so I moved it into a 200mm pot. It



filled that in no time so it's now in a 300mm pot and continues to boom!

The experiment continues as I keep finding more herbaceous plants to play with and I hope to encourage people to plant some of these dainty delights in pots so they too can enjoy the long-term colourful display. I've added a list of a few other species, some of them seasonal, that would look great in pots or hanging baskets.

Spade flower (*Afrohybanthus stellarioides*)
Dwarf morning glory (*Evolvulus alsinoides*)
Winter apple (*Eremophila debilis*)
Native sarsparilla (*Hardenbergia violacea*)
Blue trumpet (*Brunoniella australis*)
Hairy fan flower (*Scaevola ramosissima*)
Peperomia (*Peperomia bland* var. *floribunda*)

Photos by Karen Gruner

www.tanglewoodnatives.com.au

How well did you go on Koala knowledge?

Answers and more at [Koala characteristics](#)

- *Phascolarctos cinereus*
- The common wombat
- A mature, breeding male koala has the brown scent gland on his chest, which he rubs on tree trunks to deter other males from entering his home trees.
- Each paw has five digits although, on the hind paws, the second and third digits are fused together to form a double-clawed digit.
- True, koalas have individual fingerprints like humans.
- False. A Koala's eyesight is not well developed in comparison to its hearing and sense of smell.
- Koalas in the south are bigger on average, particularly the female. They also have thicker, and often browner, fur than koalas in the north.

Do you have a photo or item of interest for the newsletter? Or concerns that you would like LUCI to consider? Then send us an email with your photo or item and...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.
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